READ-FILE

File	2
Op-Sys	OS/390, VSE/ESA, BS2000/OSD
Statement	FIND
Task	This view makes it possible to read all or a selected set of records from a sequential or partitioned disk file (for example, PDS, VSE/ESA/Librarian, LMS). Using the SCAN fields, only those records containing the specified string are returned.

Common Fields for all Operating Systems

Dictionary Field Name	F/L	Mu	DE	Remarks
ERROR-CODE	N3			
ERROR-TEXT	A58			
NODE	N3		D	
NODE-NAME	A16		D	
SYSTEM-MESSAGE-CODE	A10			
DSNAME	A54		D	Required.
RECORD	A253		D	
RECORD-LENGTH	N5		D	
SEGMENT-NUMBER	N5		D	
RECORD-NUMBER	N9		D	
END-OF-FILE	A3		D	
POSITION	N5		D	
PASSWORD	A8		D	
SEGMENT-LENGTH	N3		D	
BLOCK-LENGTH	N5		D	
SCAN	A3		D	
SCAN-LIMIT	N7		D	
SCAN-TYPE	A1		D	
SCAN-LENGTH	N3		D	Relevant with SCAN-TYPE=A.
SCAN-COLUMN-FROM	N5		D	Relevant with SCAN-TYPE=A.
SCAN-COLUMN-TO	N5		D	Relevant with SCAN-TYPE=A.
TIME-LIMIT	N5		D	
DIRECT	A3		D	

Additional Fields Supported for OS/390

Dictionary Field Name	F/L	Mu	DE	Remarks
VOLSER	A6		D	Required in VSE/ESA. In OS/390 only if dataset is not cataloged.
MEMBER	A10		D	
PRODUCT	A1		D	
KEY	A253		D	
DIRECTION	A1		D	
BLOCK-TTR	B3		D	
OPTIONS	A80		D	
BLOCK-NUMBER	N9		D	
SPANNED	A8		D	

Additional Fields Supported for VSE/ESA

Dictionary Field Name	F/L	Mu	DE	Remarks
VOLSER	A6		D	Required in VSE/ESA. In OS/390 only if dataset is not cataloged.
MEMBER	A10		D	
MEMBER-TYPE	A8		D	
LIBRARY	A8		D	Required if DSNAME not specified.
SUB-LIBRARY	A8		D	Required if Librarian file.
VSAM-CATALOG	A8		D	Required if VSAM-controlled Librarian file.
LRECL	B2		D	Relevant with RECFM=F.
BLKSIZE	B2		D	
RECFM	A2		D	
BLOCK-NUMBER	N9		D	

Additional Fields Supported for BS2000/OSD

Dictionary Field Name	F/L	Mu	DE	Remarks
PRODUCT	A1		D	
KEY	A253		D	
DIRECTION	A1		D	
ELEMENT	A64		D	
ELEMENT-RECORD-TYPE	N3		D	
ELEMENT-TYPE	A8		D	
ELEMENT-VERSION	A24		D	
ELEMENT-PASSWORD	A8		D	
SYSTEM-CODE	B2			

Relevant Error Codes

Code	Text	OS/390	VSE/ESA	BS2000/OSD
500	VSAM error.	X	X	
530	Access denied by Security Facility.			X
531	Password missing or incorrect.			X
533	Requested number or records scanned.	X	X	
537	Time limit reached.	X	X	X
551	MEMBER not specified.	X	X	X
556	File is in use.	X		X
565	Syntax error in dataset name.			X
673	Access error due to FILETABLE=STATIC.		X	
674	VTOC error reading format-3 labels.		X	
675	:1: not supported.		X	
676	Not first volume of multi-volume file.		X	
687	Bad variable record.	X	X	
692	You are not permitted to access member.			X
697	LIBRARY/SUBLIB not found.		X	
698	Internal Librarian error.		X	
699	Not enough main storage available.	X	X	X
700	Invalid value specified (DSORG RECFM/TYPE).			X
701	DSNAME missing.	X	X	X
772	Requested dataset not found.			X
799	Entire System Server internal error.			X
854	Permanent I/O error.			X
856	Operator unable to mount volume.			X

Code	Text	OS/390	VSE/ESA	BS2000/OSD
872	Record format not supported.			X
873	Record length missing.			X
874	Record length > LRECL.		X	X
877	VSAM (SHOWCAT) processing error		X	
881	Error occurred while opening file.			X
882	Error occurred while closing file.			X
899	Permanent I/O error while reading dataset.	X	X	X
981	Invalid value specified (BLKCTRL/BLKSIZE/LRECL).		X	X
982	Error during use of ISAM-key.			X
985	Access to tape file not allowed.			X
991	Unknown product.	X		X
993	OPEN error.	X	X	
997	File not PDS/Sequential.	X		
998	Member not found.	X	X	X

Field Descriptions

Field Name	Type/Length	Operating System
BLKSIZE	(B2)	VSE/ESA

Block size of dataset.

Field Name	Type/Length	Operating System
BLOCK-LENGTH	(N5)	OS/390, VSE/ESA, BS2000/OSD

Length of block.

Field Name	Type/Length	Operating System
BLOCK-NUMBER	(N9)	OS/390, VSE/ESA

Number of block.

Field Name	Type/Length	Operating System
BLOCK-TTR	(B3)	OS/390

TTR of block which was read.

Field Name	Type/Length	Operating System
DIRECT	(A3)	OS/390, VSE/ESA, BS2000/OSD

Possible options:

Option	Explanation
NO	Default. The block is not read directly.
YES	If REFM=F and DSORG=PS or DA, the block is read directly according to RECORD-NUMBER and BLOCK-NUMBER. In BS2000/OSD: SAM files with RECFORM=F are read directly according to RECORD-NUMBER. PAM files and LMS elements are always read directly, if a RECORD-NUMBER is specified.

Field Name	Type/Length	Operating System
DIRECTION	(A1)	OS/390, BS2000/OSD

Possible values:

Value	Explanation
B	Read backwards.
F	Read forward

Field Name	Type/Length	Operating System
DSNAME	(A54)	OS/390, VSE/ESA, BS2000/OSD

Fully qualified dataset name.

Field Name	Type/Length	Operating System
ELEMENT	(A64)	BS2000/OSD

Name of LMS element to be read.

Field Name	Type/Length	Operating System
ELEMENT-TYPE	(A8)	BS2000/OSD

Type of LMS element to be read.
Types C and L are currently not supported.

Field Name	Type/Length	Operating System
ELEMENT-PASSWORD	(A8)	BS2000/OSD

Password, for protected LMS element (LMS V2 or above).

Field Name	Type/Length	Operating System
ELEMENT-RECORD-TYPE	(N3)	BS2000/OSD

Record type (LMS only)

Field Name	Type/Length	Operating System
ELEMENT-VERSION	(A24)	BS2000/OSD

Version of LMS element to be read.

Field Name	Type/Length	Operating System
END-OF-FILE	(A3)	OS/390, VSE/ESA, BS2000/OSD

Contains YES, if the end of record is reached. The RECORD-NUMBER field then contains the number of records in the dataset.

Field Name	Type/Length	Operating System
KEY	(A253)	OS/390, BS2000/OSD

ISAM or VSAM key.

Field Name	Type/Length	Operating System
LIBRARY	(A8)	VSE/ESA

Name of library.

Field Name	Type/Length	Operating System
LRECL	(B2)	VSE/ESA

Required with RECFM=F. Logical record length. Default is 80.

Field Name	Type/Length	Operating System
MEMBER	(A10)	OS/390, VSE/ESA

If the dataset is a PDS, member name.

Field Name	Type/Length	Operating System
MEMBER-TYPE	(A8)	VSE/ESA

Member type.

Field Name	Type/Length	Operating System
OPTIONS	(A80)	OS/390

Specify **X** to cause expansion of all ++INCLUDE statements for PANVALET.

Field Name	Type/Length	Operating System
PASSWORD	(A8)	OS/390, VSE/ESA, BS2000/OSD

Password for protected dataset.

Field Name	Type/Length	Operating System
POSITION	(N5)	OS/390, VSE/ESA, BS2000/OSD

Starting position within record. The RECORD field contains input record starting at this position.

Field Name	Type/Length	Operating System
PRODUCT	(A1)	OS/390, BS2000/OSD

Access mode used. Possible values:

Value	Explanation
L	CA-LIBRARIAN
M	BS2000/OSD LMS
P	PANVALET

Field Name	Type/Length	Operating System
RECFM	(A2)	VSE/ESA

Record format of dataset. Default is **F**.

Field Name	Type/Length	Operating System
RECORD	(A253)	OS/390, VSE/ESA, BS2000/OSD

Gives the retrieved record. The length of this field as it appears in the format buffer determines the portion of the record retrieved each time a record is requested. Field SEGMENT-NUMBER contains the segment number within the record. For example, the record is 240 bytes long and the calling program requests 80 bytes (in Natural reporting mode: OBTAIN RECORD (A80)). The calling program will then receive three segments.

Field Name	Type/Length	Operating System
RECORD-LENGTH	(N5)	OS/390, VSE/ESA, BS2000/OSD

Length of entire record (not the segment length).

Field Name	Type/Length	Operating System
RECORD-NUMBER	(N9)	OS/390, VSE/ESA, BS2000/OSD

Record position within the dataset. For BS2000/OSD, in case of a PAM file, the PAM block number must be specified here.

Field Name	Type/Length	Operating System
SCAN	(A3)	OS/390, VSE/ESA, BS2000/OSD

Specify YES to return the first record that meets all selection criteria and all subsequent records.

Field Name	Type/Length	Operating System
SCAN-COLUMN-FROM	(N5)	OS/390, VSE/ESA, BS2000/OSD

Relevant if SCAN-TYPE=A. Specifies the column number where the scan is to start. Default is 1.

Field Name	Type/Length	Operating System
SCAN-COLUMN-TO	(N5)	OS/390, VSE/ESA, BS2000/OSD

Relevant if SCAN-TYPE=A. Specifies the column number where the scan is to end. Default is the end of the record.

Field Name	Type/Length	Operating System
SCAN-LENGTH	(N3)	OS/390, VSE/ESA, BS2000/OSD

Relevant if SCAN-TYPE=A. Specifies the length of the scan string in field RECORD.

Field Name	Type/Length	Operating System
SCAN-LIMIT	(N7)	OS/390, VSE/ESA, BS2000/OSD

Specifies the maximum number of records to be scanned before the record is selected. If the limit is reached and no record found, Error Code 533 is issued.

Field Name	Type/Length	Operating System
SCAN-TYPE	(A1)	OS/390, VSE/ESA, BS2000/OSD

Specify **A** to perform an absolute scan. Wildcard symbols ***** (asterisk) and **_** (underline) are treated as normal characters.

Field Name	Type/Length	Operating System
SEGMENT-LENGTH	(N3)	OS/390, VSE/ESA, BS2000/OSD

Length of segment.

Field Name	Type/Length	Operating System
SEGMENT-NUMBER	(N5)	OS/390, VSE/ESA, BS2000/OSD

Segment number within record.

Field Name	Type/Length	Operating System
SPANNED	(A8)	OS/390

Spanned records, when RECFM is VBS or VS. Possible options:

Option	Explanation
FIRST	Record returned is the first part.
LAST	Record returned is the last part.
MIDDLE	Record returned is the middle part (not FIRST and not LAST).
NO	Record is not spanned.

Field Name	Type/Length	Operating System
SUB-LIBRARY	(A8)	VSE/ESA

Name of sublibrary.

Field Name	Type/Length	Operating System
TIME-LIMIT	(N5)	OS/390, VSE/ESA, BS2000/OSD

Specifies the maximum number of seconds a given record is to be scanned for.

Field Name	Type/Length	Operating System
VOLSER	(A6)	OS/390, VSE/ESA

Volume serial number (not relevant for BS2000/OSD).

Field Name	Type/Length	Operating System
VSAM-CATALOG	(A8)	VSE/ESA

Name of VSAM catalog where the library is kept.